TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 18, 2023

TO: All interested persons.

RE: City of Kyle
TPDES Permit No. WQ0011041002

Decision of the Executive Director.

The executive director has made a decision that the above-referenced permit application meets the requirements of applicable law. **This decision does not authorize construction or operation of any proposed facilities.** This decision will be considered by the commissioners at a regularly scheduled public meeting before any action is taken on this application unless all requests for contested case hearing or reconsideration have been withdrawn before that meeting.

Enclosed with this letter are instructions to view the Executive Director's Response to Public Comment (RTC) on the Internet. Individuals who would prefer a mailed copy of the RTC or are having trouble accessing the RTC on the website, should contact the Office of the Chief Clerk, by phone at (512) 239-3300 or by email at chiefclk@tceq.texas.gov. A complete copy of the RTC (including the mailing list), complete application, draft permit and related documents, including public comments, are available for review at the TCEQ Central Office. Additionally, a copy of the complete application, the draft permit, and executive director's preliminary decision are available for viewing and copying at Kyle Public Library, 550 Scott Street, Kyle, Texas.

If you disagree with the executive director's decision, and you believe you are an "affected person" as defined below, you may request a contested case hearing. In addition, anyone may request reconsideration of the executive director's decision. The procedures for the commission's evaluation of hearing requests/requests for reconsideration are located in 30 Texas Administrative Code Chapter 55, Subchapter F. A brief description of the procedures for these two requests follows.

How to Request a Contested Case Hearing.

It is important that your request include all the information that supports your right to a contested case hearing. Your hearing request must demonstrate that you meet the applicable legal requirements to have your hearing request granted. The commission's consideration of your request will be based on the information you provide.

The request must include the following:

(1) Your name, address, daytime telephone number, and, if possible, a fax number.

(2) The name of the applicant, the permit number and other numbers listed above so that your request may be processed properly.

(3) A statement clearly expressing that you are requesting a contested case hearing. For example, the following statement would be sufficient: "I request a contested case hearing."

(4) If the request is made by a group or association, the request must identify:

(A) one person by name, address, daytime telephone number, and, if possible, the fax number, of the person who will be responsible for receiving all communications and documents for the group;

(B) the comments on the application submitted by the group that are the basis of the hearing request; and

(C) by name and physical address one or more members of the group that would otherwise have standing to request a hearing in their own right. The interests the group seeks to protect must relate to the organization's purpose. Neither the claim asserted nor the relief requested must require the participation of the individual members in the case.

Additionally, your request must demonstrate that you are an **"affected person."** An affected person is one who has a personal justiciable interest related to a legal right, duty, privilege, power, or economic interest affected by the application. Your request must describe how and why you would be adversely affected by the proposed facility or activity in a manner not common to the general public. For example, to the extent your request is based on these concerns, you should describe the likely impact on your health, safety, or uses of your property which may be adversely affected by the proposed facility or activities. To demonstrate that you have a personal justiciable interest, you must state, as specifically as you are able, your location and the distance between your location and the proposed facility or activities.

Your request must raise disputed issues of fact that are relevant and material to the commission's decision on this application that were raised **by you** during the public comment period. The request cannot be based solely on issues raised in comments that you have withdrawn.

To facilitate the commission's determination of the number and scope of issues to be referred to hearing, you should: 1) specify any of the executive director's responses to **your** comments that you dispute; 2) the factual basis of the dispute; and 3) list any disputed issues of law.

How to Request Reconsideration of the Executive Director's Decision.

Unlike a request for a contested case hearing, anyone may request reconsideration of the executive director's decision. A request for reconsideration should contain your name, address, daytime phone number, and, if possible, your fax number. The request must state that you are requesting reconsideration of the executive director's decision, and must explain why you believe the decision should be reconsidered.

Deadline for Submitting Requests.

A request for a contested case hearing or reconsideration of the executive director's decision must be **received by** the Chief Clerk's office no later than **30 calendar days** after the date

of this letter. You may submit your request electronically at www.tceq.texas.gov/agency/decisions/cc/comments.html or by mail to the following address:

Laurie Gharis, Chief Clerk
TCEQ, MC-105
P.O. Box 13087
Austin, Texas 78711-3087

Processing of Requests.

Timely requests for a contested case hearing or for reconsideration of the executive director's decision will be referred to the TCEQ's Alternative Dispute Resolution Program and set on the agenda of one of the commission's regularly scheduled meetings. Additional instructions explaining these procedures will be sent to the attached mailing list when this meeting has been scheduled.

How to Obtain Additional Information.

If you have any questions or need additional information about the procedures described in this letter, please call the Public Education Program, toll free, at 1-800-687-4040.

Sincerely,

Laurie Gharis
Chief Clerk

LG/erg

Enclosure

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT
for
City of Kyle
TPDES Permit No. WQ0011041002

The Executive Director has made the Response to Public Comment (RTC) for the application by City of Kyle for TPDES Permit No. WQ0011041002 available for viewing on the Internet. You may view and print the document by visiting the TCEQ Commissioners' Integrated Database at the following link:
https://www.tceq.texas.gov/goto/cid

In order to view the RTC at the link above, enter the TCEQ ID Number for this application (WQ0011041002) and click the "Search" button. The search results will display a link to the RTC.

Individuals who would prefer a mailed copy of the RTC or are having trouble accessing the RTC on the website, should contact the Office of the Chief Clerk, by phone at (512) 239-3300 or by email at chiefclk@tceq.texas.gov.

Additional Information

For more information on the public participation process, you may contact the Office of the Public Interest Counsel at (512) 239-6363 or call the Public Education Program, toll free, at (800) 687-4040.

A complete copy of the RTC (including the mailing list), the complete application, the draft permit, and related documents, including comments, are available for review at the TCEQ Central Office in Austin, Texas. Additionally, a copy of the complete application, the draft permit, and executive director's preliminary decision are available for viewing and copying at Kyle Public Library, 550 Scott Street, Kyle, Texas.

MAILING LIST
for
City of Kyle
TPDES Permit No. WQ0011041002

FOR THE APPLICANT:

Yvonne Gil-Vallejo
Project Manager
City of Kyle
100 West Center Street
Kyle, Texas 78640

Timothy Samford
Division Manager of Treatment Operations
City of Kyle
100 West Center Street
Kyle, Texas 78640

INTERESTED PERSONS:

See attached list.

FOR THE EXECUTIVE DIRECTOR
via electronic mail:

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FOR PUBLIC INTEREST COUNSEL
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FOR THE CHIEF CLERK
via electronic mail:

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PO BOX 151675
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AUSTIN TX 78702-3408

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APT 605
512 EBERHART LN
AUSTIN TX 78745-4486

CLIFFORD , MICHAEL
5104 MAULDING PASS
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COLLIE , CHELSEA
490 HOLLY GROVE ST
KYLE TX 78640-5534

DANIEL , JAY
411 MARTINDALE FALLS RD
MARTINDALE TX 78655-2528

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4000 N INTERSTATE 35
AUSTIN TX 78751-4801

FLORES-CALE , YVONNE
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KYLE TX 78640-8000

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GREATER EDWARDS AQUIFER ALLIANCE
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SAN ANTONIO TX 78212-2616

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MELVIN , SEAN
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LOCKHART TX 78644-2872

MITCHELL , TRAVIS
1268 KIRBY
KYLE TX 78640-6140

MITCHELL , TRAVIS MAYOR
CITY OF KYLE
100 W CENTER ST
KYLE TX 78640-9450

PARKER CONDIE , MRS VIRGINIA
SAN MARCOS RIVER FOUNDATION
1061 MARTINDALE FALLS RD
MARTINDALE TX 78655-2536

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ROSE , VICTORIA
SAVE OUR SPRINGS ALLIANCE
STE D401
4701 W GATE BLVD
AUSTIN TX 78745-1479

SASSMAN , GORDON
27 N OLD SPANISH TRL
UHLAND TX 78640-9338

SCHEEL , TRACY
120 PASTURE CV
KYLE TX 78640-5536

TORRES , CHRISTINA
570 TOWER DR
KYLE TX 78640-5565

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THE SENATE OF TEXAS DISTRICT 21
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ZUNIGA , MIGUEL A
MIGUEL ZUNIGA
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ZWIENER , THE HONORABLE ERIN STATE REPRESENTATIVE
TEXAS HOUSE OF REPRESENTATIVES DISTRICT 45
PO BOX 2910
AUSTIN TX 78768-2910

TPDES Permit No. WQ0011041002

APPLICATION FROM CITY OF KYLE FOR a MAJOR AMENDMENT TO TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT NO. WQ0011041002	**§ § § § §**	**BEFORE THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director (ED) of the Texas Commission on Environmental Quality (TCEQ) files this Response to Public Comment on the application by the City of Kyle for a major amendment to Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0011041002 and the Executive Director's Preliminary Decision. As required by Title 30, section 55.156 of the Texas Administrative Code (TAC), before a permit is issued, the Executive Director prepares a response to all timely, relevant and material, or significant comments. State Senator Judith Zaffirini and State Representative Erin Zwiener requested a public meeting on this matter. In addition, The Office of the Chief Clerk received timely comments from Travis Mitchell – Mayor of the City of Kyle; Miguel Zuniga (City of Kyle City Council Member); Yvonne Flores-Cale (City of Kyle City Council Member); Chelsea Collie; Jay Daniel; Gordon Sassman; Kris Smale; Tracy Scheel; Christina Torres; Michael Clifford, Annalisa Pease and Nathan Glavy on behalf of Greater Edwards Aquifer Alliance (GEAA); Marisa Bruno on behalf of Hill Country Alliance (HCA); and Victoria Rose and Virginia Parker-Condie on behalf of the San Marcos River Foundation (SMRF).

If you need more information about this permit application or the wastewater permitting process, please call the TCEQ Public Education Program at 1-800-687-4040. General information about the TCEQ can be found at our website at www.tceq.texas.gov.

I. BACKGROUND

A. Description of Facility

The City of Kyle applied to the TCEQ for an amendment of the existing permit to authorize an increase in the discharge of treated domestic wastewater from an annual average flow limit not to exceed 4.5 million gallons per day (MGD) to an annual average flow limit not to exceed 12.0 MGD.

The City of Kyle Wastewater Treatment Facility is an activated sludge process plant operated in the complete mix mode with nitrification. Treatment units in the Interim I phase include two fine screens, four lift stations, four aeration basins, four final clarifiers, two post aeration basins, four aerobic sludge digestions and two ultraviolet light disinfection system. Treatment units in the Interim II phase will include four fine screens, six lift station, ten aeration basins, nine final clarifiers, four post aeration basins, four aerobic sludge digestions and three ultraviolet light disinfection system. Treatment units in the Final phase will include six fine screens, twelve aeration basins, six lift station, twelve final clarifiers, four tertiary filters, ten post aeration basins, six aerobic sludge digestions and four ultraviolet light disinfection system. The facility is operating in the interim I phase.

The draft permit also authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

The effluent limitations and monitoring requirements for those parameters that are limited in the draft permit are as follows:

A. Interim I Phase Effluent Limitations And Monitoring Requirements

The annual average flow of effluent shall not exceed 4.5 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 12,500 gallons per minute (gpm).

Parameter	30-Day Average		7-Day Average	Daily Maximum
	mg/l	lbs/day	mg/l	mg/l
Carbonaceous biochemical Demand (5-day)	10	375	15	25
Total Suspended Solids	15	563	25	40
Ammonia Nitrogen	2	75	5	10
Dissolved Oxygen (minimum)	5.0	N/A	N/A	N/A
E. coli, CFU or MPN per 100 ml	126	N/A	N/A	399

The pH shall not be less than 6.5 standard units nor greater than 9.0 standard units and shall be monitored once per week by grab sample. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

B. Interim II Phase Effluent Limitations And Monitoring Requirements

The annual average flow of effluent shall not exceed 9.0 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 25,000 gpm.

Parameter	30-Day Average		7-Day Average	Daily Maximum
	mg/l	lbs/day	mg/l	mg/l
Carbonaceous Oxygen Demand – (5-day)	7	525	12	22

Total Suspended Solids	12	901	20	40
Ammonia Nitrogen	2	150	5	10
Total Phosphorus	0.5	38	1	2
Dissolved Oxygen (minimum)	5.0	N/A	N/A	N/A
E. coli, CFU or MPN/100 ml	126	N/A	N/A	399

The pH shall not be less than 6.5 standard units nor greater than 9.0 standard units and shall be monitored five times per week by grab sample. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

C. Final Phase Effluent Limitations And Monitoring Requirements

The annual average flow of effluent shall not exceed 12.0 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 39,344 gpm.

Parameter	30-Day Average		7-Day Average	Daily Maximum
	mg/l	lbs/day	mg/l	mg/l
Carbonaceous Oxygen Demand – (5-day)	5	500	10	20
Total Suspended Solids	5	500	10	20
Ammonia Nitrogen	2	200	5	10
Total Phosphorus	0.5	50	1	2
Dissolved Oxygen (minimum)	5.0	N/A	N/A	N/A
E. coli, CFU or MPN/100 ml	126	N/A	N/A	399

The pH shall not be less than 6.5 standard units nor greater than 9.0 standard units and shall be monitored once per day by grab sample. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

Whole Effluent Toxicity Requirements

The draft permit includes chronic freshwater biomonitoring requirements as follows. The permit requires five dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 32%, 42%, 56%, 75%, and 100%. The low-flow effluent concentration (critical dilution) is defined as 100% effluent. The critical dilution is in accordance with the "Aquatic Life Criteria" section of the "Water Quality Based Effluent Limitations/Conditions" section of the draft permit.

B. Procedural Background

The permit application was received on March 11, 2022, and declared administratively complete on April 28, 2022. The Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) was published on May 11, 2022 in the *Hays Free Press/New-Dispatch.* The Executive Director completed the technical review of the application on August 22, 2022. The Notice of Application and Preliminary Decision (NAPD) was published in the *Hays Free Press/News Dispatch* on September 21, 2022. The Notice of the Public Meeting was published the *Hays Free Press/News Dispatch* on February 22, 2023. A public meeting was held on March 30, 2023. The public comment period ended at the conclusion of the public meeting.

This application was filed on or after September 1, 2015; therefore, this application is subject to the procedural requirements adopted pursuant to House Bill (HB) 801, 76th Legislature (1999), and Senate Bill (SB) 709, 84th Legislature (2015), both implemented by the Commission in its rules in 30 TAC Chapters 39, 50, and 55. This application is subject to those changes in the law.

C. Access to Rules, Laws, and Records

Please consult the following websites to access the rules and regulations applicable to this permit:

- to access the Secretary of State website: www.sos.state.tx.us;
- for TCEQ rules in 30 TAC: www.sos.state.tx.us/tac/ (select "TAC Viewer" on the right, then "Title 30 Environmental Quality");
- for Texas statutes: http://www.statutes.legis.state.tx.us/;
- to access the TCEQ website: https://www.tceq.texas.gov/rules/index.html (for downloadable rules in Microsoft Word or Adobe PDF formats, select "Rules," then "Current Rules and Regulations," then "Download TCEQ Rules");
- for Federal rules in Title 40 of the Code of Federal Regulations: http://www.epa.gov/lawsregs/search/40cfr.html; and
- for Federal environmental laws: http://www.epa.gov/lawsregs/.

The permit application, Executive Director's preliminary decision, and draft permit are available for viewing and copying at the Kyle Public Library, 5500 Scott Street, Kyle, Texas 78640-9421.

The draft permit does not limit anyone's ability to seek legal remedies from the Applicants regarding any potential trespass, nuisance, or other cause of action in response to the proposed facility's activities that may result in injury to human health or property or interfere with the normal use and enjoyment of property.

II. COMMENTS

Comment 1:

Mayor Mitchell and Tracy Scheel expressed support for the draft permit.

Response 1:

The Executive Director acknowledges the comments.

Comment 2:

GEAA, Chelsea Collie, and Gordon Sassman expressed general opposition to the draft permit.

Response 2:

The Executive Director acknowledges the comments.

Comment 3:

Kris Smale stated that the TCEQ should not authorize an increase in the discharge from the City of Kyle WWTP.

Response 3:

The preliminary engineering report from the City of Kyle provided justification for the requested flows.[1] As part of the application, the City of Kyle provided sufficient information regarding anticipated future wastewater needs and explained the timing of the proposed additional phases and needed expansion. The applicant sufficiently demonstrated the need for the requested flow.

Comment 4:

GEAA and SMRF stated that the draft permit will cause degradation of Plum Creek. SMRF specifically noted that the high levels of nutrient pollution, large volume of water, and high levels of *E. coli* will contribute to the degradation. SMRF also noted that without more stringent limits on nutrients the draft permit will violate both Tier 1 and Tier 2 antidegradation requirements. Similarly, HCA stated that the proposed discharge will cause algal blooms.

[1]City of Kyle Permit Application, Domestic Technical Report 1.1, Section 1, Item A, page 21.

Response 4:

To protect the quality of the receiving water and its associated habitat the draft permit contains more stringent effluent limits for the future expanded flow phases including: 7 mg/L $CBOD_5$, 12 mg/L TSS, and 0.5 mg/L total phosphorus for the Interim II phase and 5 mg/L $CBOD_5$, 5 mg/L TSS, and 0.5 mg/L total phosphorus in the Final phase.

E. coli limits of 126 colony-forming units or most probable number (MPN) per 100 ml are also included in the draft permit for all flow phases. This limit has been found to be protective of human health in primary contact recreation uses which includes incidental ingestion from activities such as swimming. This facility will be designed to provide adequate disinfection and, when operated properly, is not expected to cause any adverse impact to the receiving water with respect to bacteria.

Comment 5:

SMRF stated that the draft permit will violate the Texas Surface Water Quality standards.

Response 5:

The Texas Surface Water Quality Standards (TSWQ) found in 30 TAC Chapter 307 require that discharges may not degrade the receiving waters and may not result in situations that impair existing, attainable, or designated uses, and that surface waters not be toxic to aquatic life, terrestrial wildlife, livestock, or domestic animals.

The draft permit was developed in accordance with the TSWQS to be protective of water quality, provided that the Applicant operates and maintains the facility according to TCEQ rules and the draft permit's requirements. The methodology outlined in the Procedures to Implement the Texas Surface Water Quality Standards (June 2010) is designed to ensure compliance with the TSWQS.

Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater that 1) results in instream aquatic toxicity, 2) causes a violation of an applicable narrative or numerical state water quality standard, 3) results in the endangerment of a drinking water supply, or 4) results in aquatic bioaccumulation that threatens human health. The ED has made a preliminary determination that the draft permit, if issued, meets all statutory and regulatory requirements.

Comment 6:

HCA stated an increase in pollution and decreased water quality could lead to loss of native species and degradation of habitats.

Response 6:

The draft permit was developed to protect aquatic life and human health in accordance with the Texas Surface Water Quality Standards and was established to be protective of human health and the environment, provided that the City of Kyle operates and maintains the facility according to TCEQ rules and the requirements in the draft permit. As part of the permit application process, TCEQ must determine the

uses of the receiving water and set effluent limits that are protective of those uses. The effluent limits in the draft permit are set to maintain and protect the existing instream uses. Plum Creek has been assigned a High Aquatic Life Use and corresponding 5.0 mg/L dissolved oxygen (DO) criterion in the Texas Surface Water Quality Standards. These criteria are designed to ensure that aquatic life will be protected. TCEQ staff performed a DO modeling analysis of the proposed discharge using a calibrated QUAL-TX model. Based on model results, the effluent limits included in the draft permit for $CBOD_5$, ammonia-nitrogen, and minimum effluent DO for the three proposed flow phases are predicted to be adequate to ensure that instream DO levels will be maintained consistent with these established criteria.

Comment 7:

GEAA recommended the effluent limits in the draft permit be revised to 5 mg/L CBOD; 5 mg/L Total Suspended Solids; 5 mg/L Dissolved Oxygen; 2 mg/l ammonia nitrogen; and 0.5 mg/L Total Phosphorus. SMRF recommended effluent limits of 5.0 mg/L CBOD; 5 mg/L TSS, 2 mg/L Ammonia nitrogen; and 0.5 mg/L total phosphorus. SMRF also stated that the draft permit should have more stringent effluents for *E. coli* and limits for total nitrogen or nitrate nitrogen and a limit of at least 6.0 mg/L dissolved oxygen. Councilman Miguel Zuniga stated that effluent limits of 5/5/2/1 would be appropriate. Councilwoman Yvonne Flores-Cale and Tracy Scheel stated that the effluent limits should be lower.

Jay Daniel stated that the dissolved oxygen limit in the draft permit should be a minimum of 6 mg/l.

Response 7:

The City of Kyle's draft permit (WQ0011041002) contains effluent limits of 10 mg/L CBOD5, 15 mg/L TSS, 2 mg/L ammonia-nitrogen, and 5.0 mg/L dissolved oxygen (DO) for the current (Interim I) operation phase; effluent limits of 7 mg/L CBOD5, 12 mg/L TSS, 2 mg/L ammonia-nitrogen, 0.5 mg/L total phosphorus, and 5.0 mg/L DO for the Interim II phase; and effluent limits of 5 mg/L CBOD5, 5 mg/L TSS, 2 mg/L ammonia-nitrogen, 0.5 mg/L total phosphorus, and 5.0 mg/L DO for the Final phase. The Final phase limits of CBOD5, TSS, ammonia-nitrogen, and total phosphorus (i.e. 5/5/2/0.5) are consistent with the effluent limits recommended by GEAA and SMRF and are more stringent than the effluent set referenced by Councilman Miguel Zuniga.

Plum Creek has been assigned a High Aquatic Life Use and corresponding 5.0 mg/L dissolved oxygen (DO) criterion in the Texas Surface Water Quality Standards. The DO criterion ensures that aquatic life will be protected. A DO modeling analysis of the proposed discharge was conducted using a calibrated QUAL-TX model. Based on model results, the 5-day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$), ammonia-nitrogen, and minimum effluent DO for the three proposed flow phases are predicted to be adequate to ensure that instream DO levels will be maintained consistent with the criteria established for Plum Creek (i.e. 5.0 mg/L) and will therefore be protective of aquatic life uses.

Comment 8:

Jay Daniel stated that the draft permit should require UV disinfection instead of chlorine disinfection.

Response 8:

The City of Kyle is currently using UV disinfection. According to the application the City of Kyle will continue to use UV disinfection in the Interim II and Final phases.

Comment 9:

Jay Daniel stated that the draft permit should require a Class A operator.

Response 9:

The current (Interim I) operating phase of the City of Kyle wastewater treatment plant (WQ0011041002) requires a chief operator or an operator holding a Class B license or higher. To operate in the Interim II and Final phases, the facility will be required to have an operator holding a Class A license or higher. The Executive Director determines the level of operator required based on the treatment technology and the maximum permitted flow found in Figure: 30 TAC § 30.350(e).

Comment 10:

GEAA stated that it is concerned about the impact of the proposed discharge on the success of meeting the implementation goals of the Plum Creek watershed protection plan.

Response 10:

The Plum Creek Watershed Protection Plan (PCWPP) suggested effluent limits of 5 mg/L $CBOD_5$, 5 mg/L TSS, 2 mg/L ammonia-nitrogen, and 1 mg/L total phosphorus are non-regulatory and adoption of such limits by wastewater treatment plants (WWTP) is voluntary. All three phases in the draft permit contain an ammonia-nitrogen limit of 2 mg/L, which is consisted with the PCWPP recommendations. Additionally, the final phase effluent limits of the City of Kyle WWTP (WQ0011041002) of 5 mg/L $CBOD_5$, 5 mg/L TSS, 2 mg/L ammonia-nitrogen are consistent with the PCWPP recommendations, and the total phosphorus limit of 0.5 mg/L for both the Interim II and Final phase is more stringent than the 1 mg/L recommended in the PCWPP.

The 2022 Update to the PCWPP state in-stream bacteria (*E. coli*) and nutrient concentrations as issues of concern for the Plum Creek watershed. The draft permit contains an *E. coli* limit of 126 MPU per 100 mL for all three flow phases. This *E. coli* limit is protective of human health in primary contact recreation uses which includes incidental ingestion from activities such as swimming. This facility will be designed to provide adequate disinfection and, when operated properly, is not expected to cause any adverse impact to the receiving water with respect to bacteria. In fact, the PCWPP cites a 2018 Bacterial Source Tracking Study (BTS) that was conducted to track the sources of *E. coli* within the watershed. The Bacteria Source Tracking Study, "confirmed that wildlife (feral hogs, small mammals, deer, and birds) are a significant source of bacteria and nutrients in Plum Creek Watershed" with results showing 50% or greater

of *E. coli* sources identified as coming from wildlife with the second highest contributing source (20-40%) coming from domestic animals and not human sources.

Comment 11:

GEAA stated that the limits in the draft permit should become effective immediately.

Response 11:

The effluent limitations in the draft permit for the Interim I (4.5 MGD) phase are the currently in effect. The effluent limits from the draft permit for the Interim II (9.0 MGD) phase and Final phase (12.0 MGD) will come into effect once the draft permit has been approved and when the applicant has submitted the Notification of Completion Form 20007 indicating that the facility has completed construction and has begun operating under the Interim II phase or Final phase. The City of Kyle will then be required to comply with those effluent limitations in the Interim II and Final phases.

Comment 12:

GEAA commented that the draft permit should include testing for nitrogen, total nitrogen and phosphorus. Similarly, Chelsea Collie stated that the draft permit should include effluent limits for phosphorus.

Response 12:

Please see RTC #4 for a synopsis of the total phosphorus limits that were included in the draft permit.

The Procedures to Implement the Texas Surface Water Quality Standards also provide reasoning for why the Executive Director focuses on phosphorus instead of nitrogen when considering nutrient impacts.

- substantially less data on total nitrogen have been collected in Texas reservoirs, streams, and rivers.
- phosphorus is a primary nutrient in freshwaters, although nitrogen can be limiting during parts of the year.
- nitrogen can be fixed directly from the atmosphere by most of the noxious forms of blue-green algae.
- available waste treatment technologies make reducing phosphorus more effective than reducing nitrogen as a means of limiting algal production.

For these reasons, total nitrogen limits and testing was not a requirement of this draft permit.

Comment 13:

GEAA, HCA, and SMRF commented that the City of Kyle should be required to reuse its effluent.

Response 13:

TCEQ does not have the authority to mandate the method of disposal of treated effluent if an applicant adheres to the rules and provisions of TWC Chapter 26 and 30 TAC Chapters 217, 305, 307, and 309.

Comment 14:

GEAA stated that Plum Creek has excessive levels of *E. coli*, nitrates, nitrogen, phosphorus, and various pharmaceuticals.

Response 14:

Plum Creek (Segment 1810) is not currently listed on the State's inventory of impaired and threatened waters (the 2022 Clean Water Act Section 303(d) list).

The draft permit contains an ammonia-nitrogen limit of 2 mg/L and an *E. coli* limit of 126 MPU per 100 mL for all three flow phases. The effluent limits contained in the draft permit are designed to be protective of aquatic life uses and human health. As stated previously, the 2022 Update of the Plum Creek Watershed Protection Plan cites a 2018 Bacterial Source Tracking Study (BTS) that was conducted to track the sources of *E. coli* within the watershed. The Bacteria Source Tracking Study, "confirmed that wildlife (feral hogs, small mammals, deer, and birds) are a significant source of bacteria and nutrients in Plum Creek Watershed" with results showing 50% or greater of *E. coli* sources identified as coming from wildlife with the second highest contributing source (20-40%) coming from domestic animals and not human sources. City of Kyle's facility will be designed to provide adequate disinfection and, when operated properly, is not expected to cause any adverse impact to the receiving water with respect to bacteria.

Neither the TCEQ nor the EPA has promulgated rules or criteria limiting emerging contaminants, which includes Pharmaceuticals and Personal Care Products (PPCPs), in wastewater. The EPA is investigating emerging contaminants and has stated that scientists have not found evidence of adverse human health effects from emerging contaminants in the environment. Removal of some emerging contaminants has been documented during municipal wastewater treatment; however, standard removal efficiencies have not been established. In addition, there are currently no federal or state effluent limits for emerging contaminants. So, while the EPA and other agencies continue to study the presence of PPCPs, there is currently no clear regulatory regime or rules available to address the treatment of pharmaceuticals in domestic wastewater.

Comment 15:

GEAA stated that the TCEQ should consider the cumulative impacts of multiple wastewater discharges into a single small waterway.

Response 15:

Part of the technical review process is for TCEQ's Water Quality Assessment Team to perform a dissolved oxygen modeling analysis to ensure the proposed permit's effluent limits and other requirements will support the dissolved oxygen criterion and, therefore, protect the aquatic life use of the receiving waterbodies (i.e.,

Plum Creek). The model for Plum Creek that was used to assess whether the dissolved oxygen (DO) criteria for the stream is met is a large, calibrated model that contains the main stem of Plum Creek from the headwaters downstream to its confluence with the Lower San Marcos River (Segment 1808) as well as several tributaries. The model contains multiple contributing TPDES wastewater outfalls (including City of Kyle (TPDES permit no. WQ0011041002), City of Lockhart (TPDES permit nos. WQ0010210001 and WQ0010210002), City of Luling (TPDES permit no. WQ0010582002), and Plum Creek Utility Company (TPDES permit no. WQ0015636001) in order to assess potential cumulative impacts to instream DO. When running the model all contributing dischargers are entered at their full permitted flow and effluent (i.e. $CBOD_5$, ammonia-nitrogen, and DO) loading. Furthermore, to ensure that dissolved oxygen modeling results and corresponding effluent limit recommendations are conservative and protective under all conditions, Plum Creek was evaluated under what are expected to be the most unfavorable of environmental conditions, specifically hot and dry summertime conditions. This combination of conditions is unlikely to occur for any significant period of time, so it represents a very conservative, worst-case modeling scenario. Even under these conservative model assumptions, instream dissolved oxygen levels were predicted to be maintained above the criterion established for Plum Creek (5.0 mg/L).

Comment 16:

SMRF stated the draft permit will negatively impact wildlife.

Response 16:

Plum Creek has been assigned a High Aquatic Life Use and corresponding 5.0 mg/L dissolved oxygen (DO) criterion in the Texas Surface Water Quality Standards. The DO criterion ensures that aquatic life will be protected. A DO modeling analysis of the proposed discharge was conducted using a calibrated QUAL-TX model. Based on model results, the 5-day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$), ammonia-nitrogen, and minimum effluent DO for the three proposed flow phases are predicted to be adequate to ensure that instream DO levels will be maintained consistent with the criteria established for Plum Creek (i.e. 5.0 mg/L), and will therefore be protective of aquatic life uses.

The Texas Surface Water Quality Standards (TSWQS) in 30 TAC Chapter 307 require that discharges may not degrade the receiving waters and may not result in situations that impair existing, attainable, or designated uses, and that surface waters not be toxic to aquatic life, terrestrial wildlife, livestock, or domestic animals. The effluent limits in the draft permit are set to maintain and protect the existing instream uses. The draft permit was developed in accordance with the TSWQS to be protective of water quality in the receiving waters including waters located downstream of the permitted outfall, provided that the City of Kyle operates and maintains the proposed facility according to TCEQ rules and the proposed permit's requirements.

Comment 17:

Chelsea Collie stated that the WWTP is negatively impacting the health of the residents of the Waterleaf subdivision. Similarly, SMRF and HCA commented that the draft permit will harm human life.

Response 17:

As specified in the Texas Surface Water Quality Standards (TSWQS), Water in the State must be maintained to preclude adverse toxic effects on aquatic life, terrestrial life, livestock, and domestic animals resulting from contact with water, consumption of aquatic organisms, consumption of water, or any combination of the three. Water in the state must also be maintained to preclude adverse toxic effects on human health resulting from contact recreation, consumption of aquatic organisms, consumption of drinking water, or any combination of the three. The draft permit includes provisions to ensure that the TSWQS will be maintained.

Comment 18:

Chelsea Collie stated that the WWTP is negatively impacting the quality of life of the residents of the Waterleaf subdivision.

Response 18:

The TCEQ was charged by the Texas Legislature to maintain the quality of water in Texas, consistent with public health and enjoyment; thus, TCEQ's jurisdiction in a wastewater permit application is limited to water quality issues, and it does not have authorization to consider quality of life, as long as water quality is maintained. The draft permit, however, does not allow the permit holder to create or maintain a nuisance that interferes with a landowner's use and enjoyment of his or her property. The permit does not limit the ability of a landowner to seek relief from a court in response to activities that interfere with a landowner's use and enjoyment of his or her property.

Comment 19:

SMRF expressed commented that the load from the City of Kyle WWTP negatively impacts the San Marcos river.

Response 19:

The City of Kyle's discharge enters Plum Creek greater than 40 miles upstream from the confluence of Plum Creek (Segment 1810) with the Lower San Marcos River (Segment 1808). A dissolved oxygen (DO) modeling analysis on the $CBOD_5$, ammonia-nitrogen, and DO effluent loadings from the City's proposed discharge was conducted as a part of TCEQ's technical review process to assess the potential negative impacts of this discharge on the instream dissolved oxygen level of the receiving waterbody (i.e. Plum Creek). The model for Plum Creek that was used is a calibrated QUAL-TX model that accounts for Plum Creek from the headwater all the way downstream to its confluence with the Lower San Marcos River (Segment 1808). Model results indicated that no negative impacts in regard to dissolved oxygen for either Plum Creek (Segment 1810) or the Lower San Marcos (Segment 1808) are anticipated from the result of this discharge.

Comment 20:

Chelsea Collie and Christina Torres stated that the WWTP is negatively impacting property values.

Response 20:

The TCEQ does not have jurisdiction to review the effect the discharge or WWTF might have on property values of downstream landowners in reviewing a domestic wastewater discharge permit application. 30 TAC § 305.122(d) provides that the issuance of the permit does not authorize any injuries to persons or property, an invasion of other property rights, or any infringement of state or local statutes or regulations. Additionally, 30 TAC § 305.122(d) and 30 TAC § 305.125(16) provide that the issuance of a permit does not convey any property right or exclusive privilege. Those rules are incorporated into the draft permit.

Moreover, the draft permit does not limit the ability of an individual to seek legal remedies against the City of Kyle regarding any potential trespass, nuisance, or other causes of action in response to activities that may result in injury to human health or property or that may interfere with the normal use and enjoyment of property.

Comment 21:

Chelsea Collie commented that there should be more oversight of the WWTP. Similarly, Chelsea Collie stated that the facility is not effectively regulating itself. HCA and Ms. Collie noted that the facility has had multiple complaints and has several pending enforcement actions. GEAA stated that it is concerned about the ability of the WWTP to comply with the permit.

Response 21:

The TCEQ issues permits that describe the conditions under which the wastewater facility must operate. All facilities must be designed, operated, and maintained consistent with applicable TCEQ rules. These provisions require that a facility is properly operated and maintained at all times.

The TCEQ's Office of Compliance and Enforcement ensures compliance with applicable state and federal regulations. The Region 11 office is required to conduct a mandatory comprehensive compliance investigation (CCI) and additional mandatory investigations can be required if the facility is categorized as significant noncompliance (SNC). SNC is determined by the Compliance Monitoring Section of the TCEQ and is based on self-reported effluent violations.

If the facility is found to be out of compliance with the terms or conditions of the permit, the City of Kyle may be subject to enforcement. If anyone experiences any suspected incidents of noncompliance with the permit or TCEQ rules, they may report these to the TCEQ by calling the toll-free number, 1-888-777-3186, or the TCEQ Region 11 Office in Austin at (512) 339-2929. Citizen complaints may also be filed on-line at https://www.tceq.texas.gov/assets/public/compliance/monops/complaints/complaints.html. If the City of Kyle fails to comply with all requirements of the permit, it may be subject to enforcement action.

Comment 22:

Councilman Miguel Zuniga, Chelsea Collie, and Christina Torres expressed concern over odors from the facility. According to Chelsea Collie and Christina Torres, the odor is very bad at times.

Response 22:

All wastewater treatment facilities have the potential to generate odors. To control and abate odors the TCEQ rules require domestic WWTPs to meet buffer zone requirements for the abatement and control of nuisance odor according to 30 TAC § 309.13(e), which provides three options for applicants to satisfy the nuisance odor abatement and control requirements. An applicant can comply with the rule by 1) ownership of the buffer zone area; 2) restrictive easement from the adjacent property owners for any part of the buffer zone not owned by the applicant; or 3) providing nuisance odor control.[2]

According to its application, the City of Kyle intends to comply with the requirement to abate and control nuisance of odor by locating the treatment units at least 150 feet from the nearest property line.[3] This requirement is incorporated in the draft permit.[4] Therefore, nuisance odor is not expected to occur as a result of the permitted activities at the facility if the permittee operates the facility in compliance with TCEQ's rules and the terms and conditions of the draft permit.

Further, the City of Kyle proposes in its application that the City of Kyle WWTP will be an activated sludge process plant operated in the complete mix mode with nitrification. The activated sludge process is the most frequently used biological wastewater treatment process for treating domestic wastewater. When properly treated by the proposed wastewater treatment process, the effluent is not expected to have an offensive odor.

If anyone experiences nuisance odor conditions or any other suspected incidents of noncompliance with the permit or TCEQ rules, they may be reported to TCEQ by calling toll-free 1-888-777-3186, or the TCEQ Region 11 Office in Austin at (512) 339-2929. Citizen complaints may also be filed on-line at http://www2.tceq.texas.gov/oce/complaints/index.cfm.

Moreover, the permit does not limit the ability of an individual to seek legal remedies against the City of Kyle regarding any potential trespass, nuisance, or other causes of action in response to activities that may result in injury to human health or property or that may interfere with the normal use and enjoyment of property.

Comment 23:

Councilman Miguel Zuniga expressed concern over air quality.

Response 23:

This type of facility will not contribute significant amounts of air contaminants to the atmosphere, and thus, will not negatively impact human health and the environment. Air emissions from facilities such as the one proposed by the City of Kyle do not have to obtain an air quality permit, rather they are permitted by rule (30 TAC § 106.532).

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[2] 30 TAC § 309.13(e).
[3] City of Kyle Permit Application, Administrative Report, 1.1, Item No. 2(b), page 2, and Exhibit 6.
[4] City of Kyle Draft Permit, Other Requirements, Item No. 4, page 34.

Comment 24:

Chelsea Collie stated that the water in Plum Creek is so dirty that it causes the San Marcos River to change color.

Response 24:

The City of Kyle's discharge enters Plum Creek greater than 40 miles upstream from the confluence of Plum Creek (Segment 1810) with the Lower San Marcos River (Segment 1808). As such, this discharge is not expected to have any significant impact with regards to water quality in the Lower San Marcos (Segment 1808).

Comment 25:

Chelsea Collie stated that trucks are using the entrance in the Waterleaf subdivision to access the WWTP, even though the other entrance has been open for several months.

Response 25:

While the Texas Legislature has given the TCEQ the responsibility to protect water quality, the water quality permitting process is limited to controlling the discharge of pollutants into or adjacent to water in the state and protecting the water quality of the state's rivers, lakes, and coastal waters. The TCEQ does not have the authority to address issues such as traffic, streetlights, turning lanes, fire hydrants, crime, property values, noise, and trash collection.as part of the wastewater permitting process. TWC Chapter 26 and applicable wastewater regulations do not authorize the TCEQ to consider concerns regarding traffic.

Comment 26:

SMRF and HCA expressed concern regarding aquatic recreation.

Response 26:

As specified in the TSWQS, water in the state must be maintained to preclude adverse toxic effects on aquatic life, terrestrial life, livestock, and domestic animals resulting from contact with water, consumption of aquatic organisms, consumption of water, or any combination of the three. Water in the state must also be maintained to preclude adverse toxic effects on human health resulting from contact recreation, consumption of aquatic organisms, consumption of drinking water, or any combination of the three. The draft permit includes provisions to ensure that the TSWQS will be maintained.

Furthermore, conventional domestic sewage does not typically contain toxic compounds in measurable quantities that might result in toxic effects in the receiving waterbodies, unless there are significant industrial users contributing to the waste stream.

Comment 27:

HCA expressed concern over the impact of the discharge on endangered species.

Response 27:

As stated earlier, the draft permit is expected to be protective of aquatic-dependent species that reside in the receiving streams and other wildlife that utilize the receiving streams.

The discharge from this permit action is not expected to have an effect on any federal endangered or threatened aquatic or aquatic dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas authorization of the Texas Pollutant Discharge Elimination System (TPDES; September 14, 1998; October 21, 1998 update). To make this determination for TPDES permits, TCEQ and EPA only considered aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species.

Comment 28:

HCA stated that increased pollution and decreased water quality could negatively impact the local economy.

Response 28:

The TCEQ's jurisdiction over the permitting process is established by the Texas Legislature and is limited to controlling the discharge of pollutants into and protecting the quality of water in the state. The Executive Director reviewed the application submitted by the City of Kyle and determined that the draft permit meets all applicable legal and technical requirements.

Comment 29:

Kris Smale commented that the TCEQ should work with the Texas Legislature to control population growth and development.

Response 29:

The Executive Director acknowledges the comment.

CHANGES MADE TO THE DRAFT PERMIT IN RESPONSE TO COMMENT

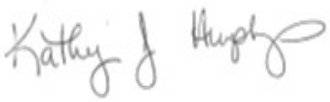
In response to Public Comments, the Total Suspended Solids (TSS) limit in the Interim II phase was decreased from 15 mg/l to 12 mg/l. The TSS limit in the Final phase was decreased from 15 mg/l to 5 mg/l.

Respectfully submitted,

Texas Commission on Environmental Quality

Kelly Keel,
Interim Executive Director

Charmaine Backens, Deputy Director
Environmental Law Division



By: _____
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